

REMARKS/ARGUMENT

Claim 6 has been amended for clarity and/or correctness:

- (1) by adding to the preamble of the claim that subject propellant is a gun propellant formulation – as clearly disclosed in Para 10, line 1, of applicants' Specification;
- (2) by amending the quantity of nitrocellulose component to from about 65% to about 95% -- as disclosed in Para 12, line 2, of applicants' Specification;
- (3) by amending the quantity of BuNENA within the claimed gun propellant formulation to be about 5% by weight – as disclosed in Para 13, lines 1-2 thereof, of applicants' Specification;
- (4) by adding within the 4th line, a comma (",") following the words "substantially 12.6% Nitrogen;"
- (5) by amending the quantity of a burning rate moderator and stabilizer to about 0.5% to about 5% of the propellant by weight – as disclosed in Para 14, line 2 thereof, of applicants' Specification;
- (6) by amending the quantity of ATEC stabilizer to about 0.5% to about 5% of the propellant by weight – as disclosed in Para 15, line 2 thereof, of applicants' Specification;
- (7) by deleting within the 14th line, the word "and" as no longer appropriate within the claim as amended;
- (8) by adding at the end of the claim a "whereby" phrase, to positively claim the fact that the subject formulation is a "gun" propellant – as repeatedly disclosed throughout the body of applicants' Specification.

35 USC §112 Rejection

Claim 6 stands rejected under 35 USC §112, first paragraph, as failing to comply with the written description requirement – the Examiner stating the applicants' quantities are not disclosed, only ranges including such quantities and that there is no basis for selecting the particular number from the ranges.

Applicants' respectfully disagree with the subject rejection, based upon the following legal precedents and argument based thereon:

- (1) The Court of Customs and Patent Appeals, held that: "[t]he burden of showing that the claimed invention is not described in the application rests on the PTO in the first instance, and it is up to the PTO to give reasons why a description not in *ipsis verbis* is insufficient." Application of Edwards, 568 F2d 1349, 196 USPQ 465, 469 (CCPA 1978). With respect to the meaning of what is sufficient was later stated by the Federal Circuit Court of Appeals as being: "whether the disclosure of the application relied upon "reasonably conveys to the artisan that the inventor had possession at the time of the later claimed subject matter." In re Hayes Microcomputer Products, Inc., Patent Litigation, 982 F2d 1527, 25 USPQ2d 1241, 1245 (Fed. Cir. 1992).
- (2) Respectfully, based upon the above cited precedents, applicants' submit that the prior submitted claims, while containing particular quantities within ranges quantity ranges originally disclosed in applicants' Specification, would convey to any artisan of ordinary skill in the art that applicants' did possess the claimed formulation at the time of patent filing. Further, the subject rejection, by merely stating that there was no "basis for selecting a particular number within the ranges" – does not address the criteria, "that any number within the ranges would not be understood by an artisan that applicants' had not fully disclosed their invention and that applicants' were not in possession of that invention at the time of filing.
- (3) However, considering the amended claims, which as amended cite particular ranges and/or quantities stated within the specification – this rejection is moot and should be withdrawn.

35 USC §103 Rejection

Claim 6 stands rejected under 35 USC §103(a) as being unpatentable over Hamilton et al. (U.S. Pat. 5,602,361) (hereinafter "*Hamilton*"), in view of Neidert et al. (U.S. Pat. 6,228,192) (hereinafter "*Niedert*") and Manning et al (U.S. Pat. ,6607,618).

The heart of applicants' invention is the use of BuNena as a plasticizer – as stated in Para 23 of applicants' Specification – "... BuNena acts as a processing aid during manufacture and imparts improved mechanical properties to the gun propellant such as elasticity and flexibility and lastly – **but of great importance – it imparts the IM properties to the gun propellant.** Emphasis added for clarity.

Respectfully, the Examiner has cited *Neidert* to show that BuNENA can be a substitute for and is equivalent to nitroglycerin as an energetic plasticizer – however, as technically proven in the attached Affidavit by Thelma Manning, that one of ordinary skill in the art looking at a gun propellant (as claimed), would not consider nitroglycerin (due to its physical structure and chemical properties, as detailed in the attached affidavit). In fact, as detailed in the attached affidavit, one of ordinary skill in the art would not even consider the rocket fuel disclosure of *Neidert* in formulating a gun propellant formulation (due to the vastly different properties of the resulting propellants, i.e. 10,000 psi rocket fuel vs. 30,000 – 125,000 psi gun propellants). So, without a logical basis to consider the disclosure of *Neidert*, there is no basis in the prior art to make obvious the use of BuNENA in applicants' claimed gun propellant, and this rejection should be withdrawn.

Further, the disclosure of *Hamilton* discloses a formula for inflating automobile air bags, with 20% nitroglycerin, as stated above, is not something anyone of ordinary skill would be considered as substitutable by BuNENA (with diametrically opposed properties) – such that *Hamilton* is not a proper obviousness reference for applicants' BuNENA based insensitive gun propellant invention. Further, as stated in the attached Affidavit, use of greater than 10% BuNENA overplasticizes a gun propellant. Such that the 20% level of "plasticizer" in *Hamilton*, would not be usable in applicants' formulation and therefore,

again, *Hamilton* is not a proper, logical, obviousness reference with respect to applicants' claimed invention.

Based upon the above Amendment, applicants respectfully submit that the amended claims are in condition for allowance and ask that a timely Notice of Allowance be issued in this case.

Respectfully submitted:

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